

UNITED STATES DEPARTMENT OF AGRICULTURE.

FEDERAL HORTICULTURAL BOARD.

WASHINGTON, D. C.

LETTER OF INFORMATION NO. 20.

OCTOBER 16, 1915.

DEAR SIR: As indicated in the following pages, citrus canker (Pseudomonas citri) was detected on three shipments of citrus stock from the Philippine Islands, and three instances of wither tip (Colletotrichum gloeosporioides) were detected on such stock from the same islands by the pathological inspectors of the Federal Horticultural Board.

Fifteen packages of potatoes from Peru were found to be affected with powdery scab (Spongospora subterranea). Powdery scab was also detected in a shipment of potatoes from

Canada by the inspectors of the State of Washington.

An undescribed potato weevil was detected in a package of potatoes from Peru. This makes the fourth weevil new to this country which has been brought in with potatoes from Andean South America.

Four interceptions of nests of the brown-tail moth (Euproctis chrysorrhoea), three of which were reported by inspectors of the State of New York and one by inspectors of the State of Maryland, have been made since the last letter appeared.

The European pine-shoot moth (Evetria buoliana) has been detected by New York inspectors, and some stock that seemed to show evidence of the work of this insect was intercepted

by West Virginia inspectors.

It has recently developed that the European mole cricket (Gryllotalpa gryllotalpa) has been introduced into New Jersey with nursery stock carrying soil around the roots. This outbreak will be described in the next issue of the Journal of Economic Entomology by Mr. Harry B. Weiss, inspector of New Jersey. From what we know of the life history of this pest it would appear that the immature stages have entered in the soil around European nursery stock such as azaleas, rhododendrons, evergreens, and boxwood. All inspectors are earnestly requested to examine, as far as practicable, the soil around such stock entering during the present season.

Yours very truly,

C. L. MARLATT, Chairman of Board.

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LIST, BY COUNTRIES, OF PESTS COLLECTED.

[The number in parentheses following name of host indicates the number of times reported.]

Country of origin and name of pest.	Host.
AUSTRALIA.	
Ceroplastes floridensis (scale insect). Chrysomphalus aurantii (red scale of California)	Eugenia (1). Cycas media (1). Camellia (1).
epidosaphes sp. (scale insect) 'Oisease: Gloeosporium opuntiae	Do. Opuntia brasiliensis (1).
BELGIUM.	
lleyrodes sp. (white fly) spidiotus britannicus (scale insect) spidiotus camelliae (greedy scale)	Palm (1).
uspidiotus cyanophylli (scale insect). uspidiotus hederae (ivy scale). Do.	Bay (6).
Aspidiotus lataniae (scale insect)	Palm (1). Do.
Chrysomphalus dictyospermi (scale insect)	Palm (7). Aralia (2).
Do	Bay (18).
Do Diaspis boisduvalii (scale insect)	Palm (3). Palm (2). Aspidistra (3).
Lecanium sp. (scale insect)	Bay (1). Ficus (1).
Saissetia hemisphaerica (hemispherical scale)	. Aspidistra (1).
Diseases: Botrytis vulgaris (gray mold)Gloeosporium	Syringa vulgaris (1).
BERMUDA.	
Saissetia nigra (scale insect)	Hibiscus (1).
BRAZIL.	
Ants	Myrciaria edulis (1). Orchid (2).
Roaches	
CANADA.	
Spongospora subterranea (powdery scab)	Potato (Irish) (1).
CHILE.	Walna mlanatain (1)
Aspidiotus forbesi var. (Forbes' scale)	Malus sylvestris (1).
Diseases:	Donkers described (2)
Acremoniella. Acrostalagmus. Bacterium phaseoli.	. Vicia faba (1).
Fusarium. Nematodes. Volutella leucotricha	Do. 5

Country of origin and name of pest.	Host.
COLOMBIA.	
Ants.	Orchid (2).
Isosoma orchidearum (Cattleya fly) (punctures)	Do.
Mites	
Psocids.	Do.
Tenthecoris bicolor (Hemipteron).	Orchid (4).
Wasmannia auropunctata (ant)	Orchid (1).
Diseases:	
Chaetodiplodia	Do.
Gloeosporium	Do.
Physalospora cattleyae	Do.
CUBA.	•
CUBA,	
Howardia biclavis (mining scale)	Mango (1).
Pseudococcus sp. (mealy bug)	Pineapple plants (3).
Saissetia oleae (black scale)	Persea americana (budwood) (1).
Spider, red	Pineapple plants (3).
Diseasé: Lasiodiplodia tubericola	Ipomoea batatas (1).
EGYPT.	•
Disease: Heterodera radicicola (nematode)	Colocasia (1).
ENGLAND,	
	(0)
Aphids (plant lice)	(?).
Eriosoma lanigera (woolly aphis)	Apple (1).
Lepidosaphes ulmi`(oyster-shell scale)	Hawthorn (1).
Disease: Dacterium tumeraciens (crown gair)	Peach (1).
FRANCE.	
Bruchus (Laria) obsoletus (bean weevil)	Phaseolus capensis (1).
Bruchus obtectus (bean weevil).	Do.
Chrysomphalus dictyospermi (scale insect)	Palm (1).
Euproctis chrysorrhoea (brown-tail moth) (nests)	Apple séedling (1).
Do	Apple stock (Ĭ).
<u>D</u> o	Fruit stocks (2).
Do	In packing around fruit stocks (1).
Notolophus antiqua (European tussock moth) (eggs)	Pear (1).
Rhopalosiphum berberidis (plant louse)	Berberis (1).
Diseases:	Thurst at also (1)
Bacterium tumefaciens	Fruit stocks (1).
Do	Myrobolan (1).
Do	Pyrus (1). Syringa persica (1).
Do.	Syringa persica alba (1).
Do.	Weigelia (1).
Dendrodochium albo-cinereum.	Acer platanoides (1).
Roestelia	Hawthorn (1).
HOLLAND.	
Aspidiotus ostreaeformis (scale insect)	Prunus (1).
Evetria buoliana (European pine shoot moth)	Pinus mughus (2).
Galumna (mite)	Prunus (1).
Leaf miner	Rhododendron (1).
Lepidosaphes ulmi (oyster-shell scale)	Beech (?) (1). Boxwood (13).
Do	Parkman's Crab (1).
Psylla buxi (Box psylla)	Boxwood (2).
Spider, red	Boxwood (1).
Diseases:	DOZ.11000 (1).
Rotrytis	Rose (1).
Botrytis yulgaris (gray mold)	Aucuba japonica (1).
Do	Syringa (1).
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Country of origin and name of pest.	Host.	
HOLLAND—continued.		
Diseases: Coniothyrium	Aucuba (1).	
Laestadia rhododendri.	Rhododendron (1).	
Pestalozzia funerea	Do.	
Pestalozzia guepini.	Rhododendron (2).	
Volutella buxi	Boxwood (1).	
ITALY.		
Aulacaspis rosae (common rose scale)	Deciduous tree (1).	
Disease: Coremium sp	Maple (?) or chestnut (?) (1).	
JAPAN.		
Bagworms	Chamaecyparis obtusa (1).	
Borers	Do. (7)	
Lachnus sp. (plant louse)	Pinus tanyosho (1).	
Colletotrichum gloeosporioides (wither tip)	Citrus (1).	
Fusarium	Colocasia multiflora (1).	
Gymnosporangium japonicum	Juniperus chinensis (1).	
Phomopsis citri Sclerotium Rolfsii	Citrus (1). Colocasia multiflora (1).	
Woroninella puerariae	Pueraria thunbergiana (Kudzu vine) (1).	
JAVA.		
Oliver to the last of the state	G (1)	
Chionaspis tegalensis (scale insect)	Sugar cane (1). Durio Zibethinus (1).	
	(1).	
MEXICO.		
Chrysomphalus dictyospermi (scale insect)	Orchid (1). Do.	
NEW ZEALAND.		
Saissetia hemisphaerica (hemispherical scale)	Camellia (1).	
Saissetia oleae (black scale)	Pittosporum (1).	
· · · · · · · · · · · · · · · · · · ·	(-)	
PANAMA.		
Chrysomphalus biformis (scale insect)	Orchid (1).	
Pseudococcus sp. (mealy bug)	Do.	
	•	
PERU.		
Spongospora subterranea (powdery scab)	Solanum tuberosum (Irish potato) (14). Solanum tuberosum (Irish potato) (1).	
PHILIPPINE ISLANDS.	Soundari Gasorosani (17151 pousso) (1).	
Acythopeus aterrimus	Orchid (1).	
Araecerus fasciculatus (weevil)	Dioscorea tubers (yams) (1).	
Aspidiotus lataniae (scale insect)	Pico mango (1).	
Calandra oryza (rice weevil)	Rice (1).	
Carpoglyphus sp. (mite)		
Chrysomphalus dictyospermi (scale insect)	Dillenia philippinensis (1). Palaquium philippinensis (1).	
Coccinellid	Orchid (1).	
Coccus hesperidum (soft brown scale)	Citus (1).	
Do	Citrus, herbarium specimens (1).	
Elaterid larvae (wireworms)	Orchid (1).	
Laemophloeus pusillus (beetle)	Dioscorea tubers (yams) (1). Rice (1).	
Lepidosaphes sp. (scale insect)	Pico mango (1).	

Country of origin and name of pest.	Host.
PHILIPPINE ISLANDS—continued.	1
Lophocateres pusillus (Siamese grain beetle)	Rice (1).
Parasitus sp	
Parlatoria sp. (scale insect)	Pico mango (1).
Phenacaspis sp. (scale insect)	Dillenia philippinensis (1).
Thenacaspis sp. (scare insect)	Dinema prinppinensis (1).
Do Prenolepis longicornis (ant)	Palaquium philippinensis (1).
renolepis longicornis (ant)	Bariana (1).
Pseudococcus virgatus (mealy bug)	Orchid (1).
Rhizoglyphus sp. (mite)	Dioscorea tubers (yams) (1).
Rhizopertha dominica (lesser grain borer). Letramorium guineense (ant) (nest)	. Rice (1).
l'etramorium guineense (ant) (nest)	. Orchid (1).
Tetramorium pacificum (ant)	. Banana (1).
Cribolium confusum (confused flour beetle)	. Rice (1).
Typhoea fumata	Dioscorea tubers (yams) (1).
Jropoda sp. (mite)	Banana (1).
Diseases:	
Colletotrichum gloeosporioides (wither tip)	Citrus (3).
Pseudomonas citri (citrus canker)	
Do	Citrus webberi (2).
	(2)
PORTO RICO.	
Bruchus sp. (bean weevil)	Beans (1).
SWEDEN.	
Diseases:	·
Claviceps purpurea	. Barley (1).
Ustilago hordei (smut)	$\mathbf{D_0}$.
,	
SYRIA (TURKEY).	
spidiotus hederae (ivy scale)	Cadars of Labanon (1)
aissetia hemisphaerica (hemispherical scale)	Do.
ausseura neimispinaerica (neimispinericai scare)	D0.
VENEZUELA.	
nts,	Orchid (3).
Phrysomphalus perseae (scale insect)	Orchid (3).
Diaspis boisduvalii (scale insect)	
schnoptera sp. (roach)	Do.
sosoma orchidearum (Cattleya fly) (punctures)	Orchid (3).
'argionia biformis (scale insect)	Orchid (2). Orchid (4).

LIST, BY STATES, OF PESTS COLLECTED.

[The number in parentheses following name of country indicates the number of times reported.]

State in which collected and name of pest.	Host.	Country of origin.
CALIFORNIA.		
Aleyrodes sp. (white fly)	. Azalea	Belgium (1).
Aspidiotus camelliae (greedy scale) Aspidiotus hederae (ivy scale)	. Palm	Do.
Aspidiotus hederae (ivy scale)	. do	Do.
Aspidiotus lataniae (scale insect) Aspidiotus rapax (scale insect)	- do	Do.
Aspidiotus rapax (scale insect)	- do	Do.
Cerataphis lataniae (plant louse)	. do	Do.
Ceroplastes floridensis (scale insect)	. Lugenia	Australia (1).
Chrysomphalus liformis (scale insect)	Orchid	Panama (1).
(hrvsomphalus dictyospermi (scale insect)	. do	Mexico (1).
Chrysomphalus sp. (scale insect)	Camellia	Australia (1).
Diaspis l'oisduvalii (scale insect)	Orchid	Mexico (1).
Lepidosaphes sp. (scale insect)	Camellia	Australia (1).
Pseudococcus sp. (mealy bug)	Orchid	Panama (1).
Saissetia hemisphaerica (hemispherical scale)	Camellia	New Zealand (1)
Saissetia oleae (black scale)	. Pittosporum	Do.
Diseases:	Thurst starter	Thursday (1)
Bacterium tumefaciens (crown gall)	Fruit stocks	France (1).
Colletotrichum gloeosporioides (wither tip)	Myrobolan	Do.
Colletotrichum gloeosporioides (wither tip)	Citrus	Japan (1).
Phomopsis citri	Citma nobboni	Do. Philippine Islands (1).
rseudomonas citri (cturus canker)	Citius webberi	1 mappine islands (1).
CONNECTICUT.		
Saissetia nigra (scale insect)	. Hibiscus	Bermuda (1).
DISTRICT OF COLUMBIA.		
	36	D - 23 (1)
Aonidia sp. (scale insect)	. Myrciaria edulis	Brazil (1).
Araecerus fasciculatus (weevil)	Dioscorea tu ers (yams)	Philippine Islands (1).
Aspidiotus for esi var. (For es' scale)	Malus sylvestris	Chile (1). Syria (Turkey) (1).
Aspidiotus hederae (ivy scale) Do		Belgium (2).
Aspidiotus lataniae (scale insect)		
Aspidiotus ostreaeformis (scale insect)	Prunus	
Bruchus (Laria) o soletus (bean weevil)		France (1).
Bruchus o' tectus (l'ean weevil)	do	Do.
Calandra oryza (rice weevil)	Rice	Philippine Islands (1).
Carpoglyphus sp. (mite)	Banana	Do.
Chionaspis tegalensis (scale insect)	Sugar cane	Java (1).
Chrysomphalus dictyospermi (scale-insect)		Philippine Islands (1).
Do	. Palaquium philippinensis	Do.
Coccus hesperidum (soft brown scale)	. Citrus	Do.
Do	. Citrus, herbarium specimens	Do.
Galumna (mite)	. Prunus	Holland (1).
Howardia Liclavis (mining scale)	. Mango	Cuba (1).
Laemophloeus pusillus (Leetle)	Dioscorea tubers (yams)	
Do	Rice	
Lepidosaphes sp. (scale insect)	Pico mango	
Lophocateres pusillus (Siamese grain beetle)	Rice	
FAITASHUS SD	Banana	
Parlatoria sp. (scale insect)	Pico mango	Do.
Phenacaspia sp. (scale insect)	Dillenia philippinensis	Do.
Do Prenolepis longcornis (ant)	Palaquium philippinensis	
Phinoglambus on (mite)	Banana Dioscorea tubers (yams)	Do. Do.
Rhizoglyphus sp. (mite)	Rice	
Saissetia hemisphaerica (hemispherical scale)	Cedars of Le'anon	Syria (Turkey) (1).
Do		Belgium (1).
Saissetia oleae (lack scale)		
Tetramorium pacificum (ant)	. Banana	Philippine Islands (1).
Tribolium confusum (confused flour beetle)	-,	

State in which collected and name of pest.	Host.	Country of origin.
DISTRICT OF COLUMBIA—continued.		
Trypopremnon n. sp. (potato weevil)	Solanum tuberosum (Irish potato).	Peru (1).
Typhoea fumata	Dioscorea tuliers (yams)	Philippine Islands (1).
Uropoda sp. (mite)	Banana	Đō.
Diseases;		C1 * (-)
Acremoniella	Daphne tangutica	China (1).
Acrostalagmus	Ficus.	Do.
Bacterium phaseoli	Vicia faba Rose	Do.
Botrytis	Aucuba japonica	Holland (1).
Botrytis vulgaris (gray mold)	Syringa.	Do. Do.
Do	Syringa vulgaris	Belgium (1).
Claviceps purpurea	Barley	Sweden (1).
Colletotrichum gloeosporioides (wither tip)	Citrus	I hilippine Islands (3).
Diplodia durionis	Durio Zibethinus	Java (1).
husarium.v	Daphne tangutica	China (1).
Gloeosporium opuntiae	Opuntia brasiliensis	Australia (1).
Gloeosporium	Palm	Belgium (1).
Heterodera radicicola (nematode)	Colocasia	Egypt (1).
Laestadia rhododendri	Rhododendron	Holland (1).
Lasiodiplodia tubericola	Ipomoea batatas	Cuba (1).
NematodesPestalozzia funerea	Daphne tangutica	China (1). Holland (1).
Pestalozzia guepini	do	Holland (2).
Pseudomonas citri (citrus canker)	Citrus	Philippine Islands (2).
Do	Citrus webberi	Philippine Islands (1).
Spongospora subterranea (powdery scab)	Solanum tuberosum (Irish potato).	Peru (14).
Ustilago hordei (smut)		Sweden (1). China (1).
FLORIDA.		
Fseudococcus sp. (mealy bug)	Fineapple plantsdo	Cuba (3). Do.
Diseases:		100.
Fusarium	Colocasia multiflora	Jøpan (1).
Sclerotium Rolfsii	do	Do.
GEORGIA.		
Coccus hesperidum (soft brown scale)	Bay	Belgium (1).
HAWAII.		
Acythopeus aterrimus	Orchid	Philippine Islands (1).
Coccinellid	do	Do.
Elaterid larvæ (wireworms)	do	Do.
Fseudococcus virgatus (mealy bug)	do	Do.
Tetramorium guineense (ant) (nest)	do	Do.
ILLINOIS.		•
Aspidiotus britannicus (scale insect)	Bay	Belgium (1).
Coccus hesperidum (soft brown scale)	dodo	Do.
Do	Palm	Do.
Rhopalosiphum berberidis (plant louse)	Berberis	Trance (1).
INDIANA.		
Aspidiotus cyanophylli (scale insect)		Belgium (1).
Aspidiotus hederæ (ivy scale)	conifers.	Do.
TENDERSONIN TENDERSON (TATA DOGITO)		100,

State in which collected and name of pest.	Host.	Country of origin.
INDIANA—continued. Coccus hesperidum (soft brown scale)	conifers. Palm	
Diaspis boisduvalii (scale insect)	do	Do.
Notolophus antiqua (European tussock moth) (eggs).	Pear	France (1).
KANSAS.		
Disease: Bacterium tumefaciens	Syringa persica	Do.
KENTUCKY.		
Aspidiotus hederæ (ivy scale)	PalmAucuba	
MARYLAND.		
Euproctis chrysorrhoea (brown-tail moth) (nests) Do Leaf miner. Lepidosaphes ulmi (oyster-shell scale) Spider, red. Do.	In packing around fruit stocks. Rhododendron Boxwood	France (1). Do. Holland (1). Holland (11). Belgium (1). Holland (1).
MASSACHUSETTS.		
Aspidiotus hederae (ivy scale). Chrysomphalus ficus (Florida red scale). Coccus hesperidum (soft brown scale). Lecanium sp. (scale insect). Disease: Woroninella puerariae.	PalmBay	Belgium (1). Belgium (5). Belgium (1).
MISSOURI.	n.	D-1-1 (1)
Coccus hesperidum (soft brown scale)	Palm	Belgium (1). Do. Do.
NEBRASKA.		
Aspidiotus hederae (ivy scale)	Palm	Belgium (1).
NEW HAMPSHIRE.		
Lepidosaphes ulmi (oyster-shell scale)	Beech (?) Parkman's Crab	Holland (1). Do.
Ants	do	Brazil (1). Belgium (1). Do. Belgium (7).
Do. Chrysomphalus ficus (Florida red scale) Do. Chrysomphalus perseae (scale insect). Coccus hesperidum (soft brown scale). Hemichionaspis aspidistrae (aspidistra scale). Pseudococcus sp. (mealy bug) Do.	Palm Orchid Bay Aspidistra Ficus Palm	Belgium (7). Venezuela (1). Belgium (8). Belgium (3). Belgium (1). Belgium (2).
Roaches. Targionia biformis (scale insect)	Orchiddodo	Brazil (1). Venezuela (1).

State in which collected and name of pest.	Host.	Country of origin.
NEW YORK CITY (FEDERAL INSPECTION).		
Ants	Orchid	Colombia (2).
Do		Venezuela (3).
Aulacaspis rosae (common rose scale)	Rose cuttings	Italy (1).
Bruchus sp. (bean weevil)	Beans	Porto Rico (1).
Chrysomphalus aurantii (red scale of California) Diaspis boisduvalii (scale insect)	Orchid	Australia (1). Brazil (2).
Do	do	Venezuela (1).
Ischnoptera sp. (roach)	- do	Do.
Isosoma orchidearum (Cattleva fly) (punctures)	. do	Colombia (2).
Do	l do	Venezuela (3).
Lepidosaphes ulmi (oyster-shell scale)	Deciduous tree	Italy (1).
Mites	Orchid	Colombia (1).
Psocids		Do. Venezuela (1).
Tenthecoris bicolor (Hemipteron)	- do	Colombia (4).
Do	do	Venezuela (4).
Wasmannia auropunctata (ant)	do	Colombia (1).
Diseases:		(=)•
Chaetodiplodia	. do	Do.
Coremium sp. Gloeosporium.	. Maple (?) or chestnut (?)	Italy (1).
Gloeosporium	Orchid	Colombia (1).
LasiodiplodiaPhysalospora cattleyae	. Palm	Brazil (1).
Physaiospora cattreyae	Orema	Colombia (1).
NEW YORK.		
Euproctis chrysorrhoea (brown-tail moth) (nests).		France (1).
<u>D</u> o		Do.
Do		Do.
Evetria buoliana (European pine shoot moth)	Pinus mughus	Holland (1).
оню.		. *
Disease: Bacterium tumefaciens	. Syringa persica alba	France (1).
PENNSYLVANIA.		
Aspidiotus hederae (ivy scale)		Belgium (4).
Coccus hesperidum (soft brown scale)	. Bay	Belgium (1).
Lachnus sp. (plant louse)	Pinus tanyosho	Japan (1).
Lepidosaphes ulmi (oyster-shell scale)	Boxwooddo	$egin{array}{c} \operatorname{Holland} \ (1). \\ \operatorname{Holland} \ (2). \end{array}$
Spider, red	Aspidistra	Belgium (1).
Diseases:	215praistra.	Boigium (1).
Dendrodochium albo-cinereum	Acer platanoides	France (1).
Roestelia	Hawthorn	Do.
RHODE ISLAND.		
Lepidosaphes ulmi (oyster-shell scale)	Boxwood	Holland (1).
UTAH.	·	
Diseases:		
Bacterium tumefaciens		
Do	. Weigelia	Do.
VIRGINIA.		•
Disease: Volutella buxi	. Boxwood	Holland (1).
WASHINGTON (STATE).		
A-1-1- (-1+ 1:)	(9)	England (1)
Aphids (plant lice)	Chamaecyparis obtusa	England (1). Japan (1).
±ag ₩ VIIII0	dodo.	Do.

State in which collected and name of pest.	Host.	Country of origin.
WASHINGTON (STATE)—continued.		
Coccus hesperidum (soft brown scale). Eriosoma lanigera (woolly aphis). Lepidosaphes ulmi (oyster-shell scale). Diseases: Bacterium tumefaciens (crown gall). Gymnosporangium japonicum. Spongospora subterranea (powdery scab).	Apple	Do. Japan (1).
WEST VIRGINIA.		*
Evetria buoliana (?) (European pine shoot moth) (?) (work of).	Pinus mughus	Holland (1).